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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/910,594	07/20/2001		Kenji Tokumitsu	16869N-029500US	2186
20350	7590	08/18/2004		EXAM	INER
TOWNSEND AND TOWNSEND AND CREW, LLP				AGUSTIN, PETER VINCENT	
TWO EMBA EIGHTH FL		ERO CENTER		ART UNIT	PAPER NUMBER
SAN FRAN	CISCO.	CA 94111-3834		2652	

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summany	09/910,594	TOKUMITSU ET AL.					
Office Action Summary	Examiner	Art Unit					
	Peter Vincent Agustin	2652					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on	·						
2a)⊠ This action is FINAL . 2b)☐ This	This action is FINAL . 2b) This action is non-final.						
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1,3-6,8-11 and 13-16</u> is/are pending i	Claim(s) <u>1,3-6,8-11 and 13-16</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) <u>1,3-6,8-11 and 13-16</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/o	or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine	er.						
10)⊠ The drawing(s) filed on <u>20 July 2001</u> is/are: a)	igtie accepted or b) $igsqcup$ objected to	by the Examiner.					
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	•						
Priority under 35 U.S.C. § 119							
12) △ Acknowledgment is made of a claim for foreign a) △ All b) ☐ Some * c) ☐ None of: 1. △ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority document application from the International Burea	s have been received. Is have been received in Applicat Inity documents have been receiv In (PCT Rule 17.2(a)).	ion No ed in this National Stage					
* See the attached detailed Office action for a list Attachment(s)	of the certified copies not receive	∌d.					
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate Patent Application (PTO-152)					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:						

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DETAILED ACTION

Claim Objections

1. Claims 8-11, 15 & 16 are objected to because of the following informalities:

Claim 8, line 5: "in information" should be --in the information--.

Claim 8, line 6: "said defective" should be --said defective area--.

Claim 9, line 2: "allowable number of times of information" should be --allowable number of times of recording of information--.

Claim 15, line 6: "inn" should be --in--.

Claims 10, 11 & 16 are dependent upon objected base claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 3, 4, 6, 8, 9 & 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami (US 5,574,708).

In regard to claim 1, Kawakami discloses an information recording medium (figure 1, element 1) which includes a user data area (figure 4, element 2a) and a medium management information area (column 6, lines 3-5) and which allows update of information, comprising: an alternative area for a defective area on said information recording medium detected when information is recorded or reproduced (figure 4, element 2b); a management area for

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management of correspondence between said defective area and said alternative area (figure 4, element 2b); and information recorded on said information recording medium indicative of an allowable number of times of recording of information (column 5, lines 52-54; column 6, lines 3-5).

In regard to claim 3, Kawakami discloses an information recording control method for conducting recording and reproduction of information to an information recording medium (figure 1, element 1) having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b), and a medium management information area (column 6, lines 3-5) to store update information, wherein information representative of an allowable number of times of recording of information is previously recorded to said information recording medium (column 5, lines 52-59; column 6, lines 3-5), said method comprising: if a defect on said information recording medium is detected during recording or reproduction of information, then selectively recording information indicating a location in said alternative area that is used in place of said defect to said medium management information area (column 3, lines 33-48), wherein said step of selectively recording is performed if a number of recordings made to said information recording medium does not exceed said allowable number of times of recording (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 4, Kawakami discloses that an information update count is recorded to said medium management information area (column 5, lines 52-59) and wherein said update information is selectively stored to said medium management information area based on a comparison of said update count and said allowable number of times of recording (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 6, Kawakami discloses that if said allowable number of times of recording is set (figure 5, step S10; column 7, lines 4-8), then allowing updates of recording times to said medium management information area when said update count is less than said allowable number of times of recording (figure 5, step S11; column 7, lines 8-10) and not allowing said updates of recording times to said medium management information area when said update count is greater than or equal to said allowable number of times of recording (column 7, lines 18-20 & 65-67), and wherein if said allowable number of times of recording is not yet set, then allowing said updates of recording times to said medium management information area. It should be noted that in the event that the "allowable number of times of recording is not yet set", the allowable number of times is assumed to be infinite, i.e., step S10 of figure 5 will decide that the number of writing times is not greater than the number of life times; therefore, unlimited recording is allowed.

In regard to claim 8, Kawakami discloses an information recording control method for conducting recording and reproduction of information to an information recording medium (figure 1, element 1) which allows update of information, comprising the steps of: recording information indicating an alternative area (figure 4, element 2b) associated with a defective area to a medium management information area (figure 1, element 31) in the information recording medium when said defective area is detected during said recording or reproducing information (column 3, lines 33-48), and controlling said recording and reproduction of information depending on the number of times said information is recorded to said medium management information area (figure 6, step S13; see also column 5, lines 52-63).

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In regard to claim 9, Kawakami discloses that the allowable number of times of recording of information is previously recorded to said information recording medium (column 5, lines 52-54; column 6, lines 3-5), said method further comprising a step for controlling the recording and reproduction of information by comparing said allowable number of times of recording to said number of times an alternative area is recorded to said medium management information area (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 13, Kawakami discloses an information recording medium (figure 1, element 1) having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b) for detected defects, a medium management information area (figure 1, element 31) to store update information, wherein information representing an allowable number of times of recording of information is pre-recorded on said information recording medium (column 5, lines 52-54; column 6, lines 3-5).

In regard to claim 14, Kawakami discloses an information recording medium (figure 1, element 1) having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b) for detected defects, and a medium management information area (figure 1, element 31) to store update information, wherein an update count of recordings made to said medium management information area is recorded in said medium management information area, wherein information representative of an allowable number of times of recording of information is previously recorded on said information recording medium (column 5, lines 52-54; column 6, lines 3-5).

In regard to claim 15, Kawakami discloses an information recording control method for conducting recording and reproduction of information to an information recording medium

(figure 1, element 1), said information recording medium having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b) for the defective area, and a medium management information area (figure 1, element 31) to store update information, wherein an update count representative of a number of recordings made to said medium management information area is recorded in said medium management information area, and wherein information representative of an allowable number of times of recording of information is previously recorded on said information recording medium, and wherein recording operations are prevented when said update count exceeds said allowable number of times of recording of information (column 5, lines 52-63; column 6, lines 3-5; figure 6, step S13).

4. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (hereafter Ito) (US 5,715,221).

Ito discloses an information recording control method for conducting recording and reproduction of information to an information recording medium (figure 13, element 1312) which allows update of information, comprising the steps of: recording information indicating an alternative area associated with a defective area to a medium management information area in the information recording medium when said defective area is detected during said recording or reproducing information (column 4, lines 28-32), and controlling said recording and reproduction of information depending on the number of times said information is recorded to said medium management information area (figure 14, step S1404; column 10, lines 36-39).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 5, 10, 11 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami in view of Ito.

In regard to claims 5 & 16, for a description of Kawakami, see the rejection above.

Kawakami, however, does not disclose that the recording to said medium management information area is continued when said medium management information area is recorded in multiple on the two or more areas and recording is completed normally to the two or more predetermined number of areas among said multiple recording areas.

Ito in the defect management art, discloses that the recording to said medium management information area is recorded in multiple on the two or more areas and recording is completed normally to the two or more predetermined number of areas among said multiple recording areas (column 2, lines 29-30). It would have been obvious to one of ordinary skill in the ad at the time of invention by applicant to have added the step of continuing the recording to two or more predetermined areas as suggested by Ito to the method of Kawakami. The motivation would have been to increase the reliability of recording even with the presence of errors.

In regard to claim 10, Kawakami discloses a step for continuing the recording and reproduction of information when the recorded information is read out normally (figure 7, steps 525 & S27). Kawakami, however, does not disclose that the information indicating the alternative area is recorded to said medium management information area in multiple to a plurality of areas.

Ito in the defect management art, discloses that the information indicating the alternative area is recorded to said medium management information area in multiple to a plurality of areas (column 2, lines 29-30). It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to have recorded the information in multiple areas as suggested by Ito in addition to the method described by Kawakami. The motivation would have been to increase the reliability of recording even with the presence of errors.

Furthermore, in regard to claim 11, Kawakami discloses that the recording and reproduction of information are continued when the number of normal areas in said medium management information area is the predetermined number or larger even if the number of times of recording to said medium management information area is said allowable number of times of recording or larger (figure 6, steps S13 & S16).

Response to Arguments

Regarding claim 1, applicant argues that Kawakami clearly describes "a number of lifetimes" information being stored in EPROM (41) which is separate from the optical disk, but does not show the claimed "allowable number" information being "recorded on said information recording medium" as claimed. The examiner disagrees because applicant did not consider every teachings from Kawakami. Kawakami also teaches that "the number of writing times of each block maybe written in each block of the optical disk as well (see column 6, lines 3-5).

Regarding claim 8, applicant argues that neither Kawakami nor Ito shows that writing operations are dependent on the number of times the medium management information area is recorded. The examiner disagrees. Kawakami discloses this limitation in column 5, lines 52-63. It should be noted that the "number of life times" is stored on the memory 31, which corresponds

to the claimed medium management information area. Ito discloses this limitation in column 10, lines 36-39. In this case, the SDL recited on column 10, line 34 corresponds to the claimed medium management information area.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 703-305-8980. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin Art Unit 2652 August 16, 2004

HOA T. NGUYEN

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600